

LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

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Spring Wildflowers at Shu Swamp Preserve

Spring wildflowers! Visions of these ephemeral beauties sustain us during the dark days of winter. And one of Long Island's special places, Shu Swamp, is where this vision becomes vividly alive!

Shu Swamp in Mill Neck is more formally known as the Charles T. Church Nature Preserve and the Schmidlapp Lowlands. A combination of wetlands and upland, Shu Swamp is a dramatic and beautiful corner of wildlife and nature in Nassau County. Wondering what "Shu" means? It is an old Dutch word, "Sheogh" meaning cascading waters, and reminds us that Wolver Hollow Road was the dividing line between the Dutch and English until 1650.

This wooded wetland is fed by the Beaver Brook system which originates in springs and seeps from the east hillside along Wolver Hollow Road and in the upland woods east of Piping Rock Club. The water of Beaver Brook is clear and cold with a sand and gravel bottom, and is home to brown trout, brook lamprey and other fish. The heavy clay soils in Mill Neck valley and a high groundwater table have brought about these extensive wetlands,

covering about 60 acres, with many smaller streams, springs, and seeps besides Beaver Brook.

Shu Swamp is rewarding at any time of year, with its towering tulip trees, the brilliant autumn color of the tupelos and red maples around the pond, the spears of skunk cabbage already emerging by New Year's, or the heady fragrance of *Clethra* in late summer. But to my mind the most exciting time is the last week of April and first week of May. Everywhere one looks there is a rich but fleeting variety of wildflowers!

The Lily Family, Liliaceae, with its flower parts in 3's is well represented. Trout Lily, *Erythronium americanum*, carpets the forest floor with its mottled leaves. Always more leaves than flowers (it takes 7-8 years for a trout lily bulb to mature to flowering size), still one can find concentrations of these delicate creamy-yellow, 6-petaled lilies often at the base of the tulip tree trunks. Wake Robin, *Trillium erectum*, adds its deep maroon red; and in a few places one can find the white form, *album*, as well as intermediate hues. Wild Oats, *Uvularia sessilifolia*,



American Dog Violet (*Viola conspersa*), a rare species on L.I. occurring at Shu Swamp Preserve

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with pendant creamy bells, grows in several places in the Schmidlapp lowlands and seems to be increasing. Canada Mayflower, *Maianthemum canadensis*, with small racemes of white flowers is everywhere, almost a groundcover. These bloom about a week later. False Hellebore, *Veratrum viride*, provides contrast with its bold deeply pleated leaves, which I find more interesting than the later yellowish green flowers. Solomon's Seal, *Polygonatum biflorum*, and Solomon's Plume, *Smilacina racemosa*, grow side by side, especially along Beaver Brook.

Also in the Liliaceae are large patches of Ramp or Wild Leek, *Allium tricoccum*. They grow both in the wetter areas and on the upland hillside, but in early spring we see only the leaves. Not until midsummer when the leaves are gone does Wild Leek produce its umbel of creamy white flowers. Ramp festivals in West Virginia and North Carolina celebrate this most pungent of the onion tribe, but of course they are protected in Shu Swamp. Turk's Cap Lily, *Lilium superbum*, is yet another member of the Lily family whose leaves we make a mental note of, so that we can come back to admire this elegant orange-red lily in midsummer. Recently Barbara Conolly counted 25 of these lovely lilies in one area under witch-hazel shrubs.

Another group of wild flowers that adds to the early spring show is the Buttercup family, Ranunculaceae. One of the earliest to bloom in the swamp is Marsh Marigold, *Caltha palustris*, whose scientific name means "goblet of the swamp". Vibrant showy yellow flowers up to 1 1/2" wide are found along the smaller streams and Beaver Brook. These are not to be confused with Lesser Celandine, *Ranunculus ficaria*, a weedy member of the family that has been on the increase in Shu Swamp as well as nearby lawns and gardens. Marsh Marigold has clusters of deep yellow flowers, actually 5-9 sepals with no petals, held up above the heart shaped leaves. At least 5 other buttercups can be seen: Kidney-leaved Buttercup, Tall Buttercup, Hooked Buttercup, Bristly Buttercup and Swamp Buttercup - all adding their vivid yellow to the swamp. The Wood Anemone, *Anemone quinquefolia*, adds delicate patches of white to pinkish flowers (5 sepals) in somewhat drier areas. Try to pick a sunny day, for these as well as some of the other ephemeral spring flowers are reluctant to open on overcast days.

Along side of, and even mixed in with the Wood Anemone, is another charming wildflower, Spring Beauty, *Claytonia virginica*. Its fleshy grasslike leaves are a clue to its being a member of the Purslane family. This is a flower to look very closely at, even with a 10x lens: dark pink veins and almost magenta-pink stamens can best be appreciated this way. Spring Beauty is a rarity on Long Island, and I'm happy to report that it is definitely increasing in the Schmidlapp lowlands!



Perhaps the signature of a wet woodland is Skunk Cabbage, *Symplocarpus foetidus*, in the Arum family, Araceae. Its green spears poke up even through ice in the wetter areas, and by late winter it is in flower. The flowers are fascinating: at ground level a purple-brown and green mottled hood (spathe) protects the knob-shaped cluster of individual flowers inside (the spadix). The flowers generate their own heat, maintaining the air inside the spathe at a constant 72 degrees, as long as the outside air is above freezing. The plants do this by metabolizing stored starch in their large rootstock. There is still more to be understood here, but it does attract the earliest insect pollinators. You can still find many Skunk Cabbage flowers at the end of April, although by then the large leaves make it a game of hide-and-seek.

Jack-in-the-Pulpit, *Arisaema triphyllum*, also in the Arum family, brings to mind a preacher (the spadix) standing in his pulpit with the arched hood (the spathe). In wetter areas of Shu Swamp there are many shades of jacks, from pale green stripes to deep mahogany, emerging as sharp spears from the muck.

And violets! What would spring be without violets! Blooming right alongside of Marsh Marigolds, sometimes making a trio with the woolly fiddleheads of Cinnamon Fern, is the Marsh Blue Violet, *Viola cucullata*. The blue-violet flowers, with a darker patch towards the center, stand up above their leaves to show themselves off. Much

shyer and rarer is the tiny paler Dog Violet, *Viola conspersa*, seen in one location along Beaver Brook. This is a stemmed violet, with leaves and flowers on the same stem. Our brighter Common Blue Violet, *Viola sororia*, is found here and there in the swamp, and the Northern White Violet, *Viola pallens*, is tucked away in some more hidden corners.

The Mustard family, Brassicaceae (Cruciferae), with its 4-petaled flowers in the shape of a cross is also counted among this spring round-up. Garlic Mustard, *Alliaria petiolata*, is ubiquitous. Early Winter Cress, *Barbarea verna*, and Yellow Rocket or Common Winter Cress, *B. vulgaris*, are here and there in the open parts; and in wetter spots Pennsylvania Bittercress, *Cardamine pensylvanica*, whose flowers are white, not yellow. Watercress, *Nasturtium officinale*, with its small white flowers and pungent leaves grows right in the fast-moving water of Beaver Brook. Whitlow Grass, *Draba verna*, with tiny flowers grows in the small meadow next to the parking area.

While these flowers in the Mustard family are quite common, there are still other rare finds in Shu Swamp. Just emerging in the beginning of May are the odd flowering spikes of an extensive colony of Squawroot, *Conopholis americana*. These parasitic plants resemble pine cones with their overlapping brown scales and lack of chlorophyll; although they live off the roots of black oaks, they are true flowering plants. This large healthy colony is near the upland path in the Church preserve.

Another not-to-be-missed charmer, Dwarf Ginseng, *Panax trifolius*, has delicate little white umbels of flowers and covers the ground in one area of the Schmidlapp lowlands.

All these and more reward the sharp-eyed visitor in early spring, along with the emerging fiddleheads of a rich fern flora. The promise of later blooming wildflowers such as the Turk's Cap Lily, Yellow Flag Iris, Star Flower, and even Cardinal Flower, keep one coming back again and again.

Shu Swamp, across from the Mill Neck railroad station, is open every day except Friday. It is preserved and managed by the North Shore Wildlife Sanctuary, whose able warden is Bob Hornosky.

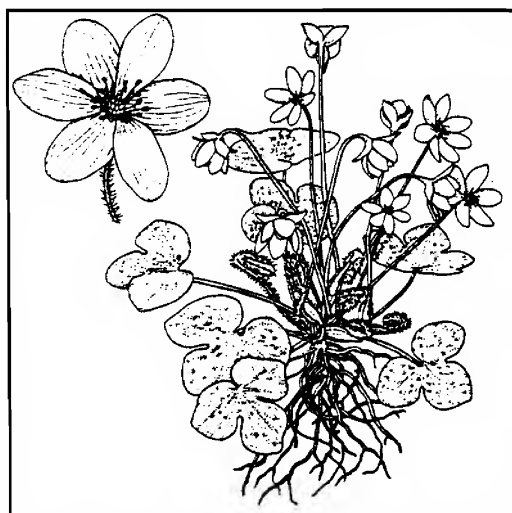
Carol Johnston, Locust Valley

Wildflower Legends

Anemone - Buttercup - Hepatica - Bloodroot.... the mere mention of these ephemeral wildflowers brings to mind an image of warm spring days, especially in this snowiest of winters. To the botanist, the field season has begun! But to my mind, these plants evoke other images. Where do these names originate? How were these plants used by ancient people? And - the question that inevitably arises on field trips - how did people long ago even think to use certain herbs to treat their ills?

Some names are obvious. For example, Canada Mayflower, *Maianthemum canadense*, either way, the name tells when and where the plant could be found. Even its older nickname of Bead Ruby is quite descriptive of its red fruit. Anemone or Windflower, comes from the Greek god of the winds on Mount Olympus. "Buttercup" is straightforward enough, due to the color of the flower, but *Ranunculus*? The herpetologists among us should recognize *Rana* as a genus of frog; frogs live in a watery environment, as do many species of buttercup! Yes, sometimes the name origins require a stretch of the imagination, but that's half the fun.

Herbal lore is steeped in ancient tradition. In Mesopotamia, Egypt, and ancient Greece, it was believed that sickness was manifested by evil spirits. The gods were physicians who taught the knowledge



In ancient times Hepaticas were thought to cure liver ailments due to the shape and color of the leaves (Doctrine of Signatures).

of herbs and their medicinal properties to man. It was in classical Greece that a scientific basis to herbal medicine was added. One philosophy of particular note was the **Doctrine of Signatures**, which became popular in the 16th century. Codified in Europe by a controversial physician named Paracelsus, this theory claimed that every plant acts as its own definition of medical application, by resembling a part of the body or the cause of the affliction. William Coles, an English herbalist wrote in 1656, "God had not only stamped on plants a distinct form, but also given them particular signatures, whereby a man may read even in legible characters the use of them." Nicholas Culpeper (1616-1654) was an influential supporter of the Doctrine, as well as of astrological theories. His *Herbal* published in 1652 was very successful, the first such work written for ordinary people to use herbs in their everyday lives.

The classic example of the Doctrine of Signatures is the *Hepatica*. With its three-lobed leaves, it was thought to be useful in liver disease, a remedy that was used for centuries. In fact, a boom in liver tonic in the 1880's led to the consumption of over 450,000 pounds of this plant in a single year. Bloodroot, *Sanguinaria canadensis*, is named for its bright red or orange sap - obviously a sign for illnesses of the blood. Even its Latin name is derived from the word for blood. This plant is currently used commercially in some toothpastes and anti-plaque dental rinses. Eyebright (*Euphrasia nemorosa*), at one time used



Bloodroot: named for the orange-red juice in its roots and stem (illustration from Durant, 1976).

for vision problems, was named for a black pupil-like spot in the corolla. The leaves of Earth-smoke or fumitory (*Fumaria officinalis*) were smoked for disorders of the head, and in the Middle Ages were used to drive away evil spirits in exorcisms. And Vipers bugloss (*Echium vulgare*) got a reputation for neutralizing the bites of serpents and adders, because the seed looks like the head of a snake and the spots on the stem resemble those on its skin.

Some of the legends surrounding our common wildflowers can be quite intriguing. If the leaf of St. Johnswort (*Hypericum perforatum*) is held to the light, you will see dots resembling the pores in our skin. This meant that this plant could be used for cuts and skin ailments. The herb is still used in folk medicine, dried and soaked in oil as a liniment. Be careful if you decide to try it, however - it could lead to a photosensitive reaction. St. Johnswort has even more of an intriguing history. Named in honor of St. John the Baptist, the herb was collected on the day of Midsummer, June 24, to protect a house from goblins, devils, and witches. Hawkweeds (*Hieracium*, from the Greek word *hierax*, hawk) were thought to be eaten by hawks to improve their eyesight. The little black hairs that cover the stem, looking like the dust on a coal miner, gave rise to the nickname "grim the collier." Possibly the most outrageous legend surrounds the loosestrifes, however. Named for King Lysimachus, the plant was known to have calming properties. One day the good king, taking a shortcut through a pasture, was chased by an irate bull. He fed the animal some of this herb, thereby "loosing the bull of its strife" or unruliness!

These are only a few of the tales that have arisen through the centuries, some commonplace, some sensible, and some that stir the imagination to a distant past. Knowing the identification of a plant is certainly valuable, but learning the "personality" behind the name gives an added dimension to our field studies. If you have become as fascinated as I have, I recommend reading *Wildflower Folklore* by Laura C. Martin, *The History and Folklore of North American Wildflowers* by Timothy Coffey, and the *Peterson Field Guides to Edible Plants and Medicinal Plants* for a start. It's an interest that will not fail to enthrall you.

Lois Lindberg, Oyster Bay Cove

A Rosa By Any Other Name...

There are some things that can be a real nuisance to those who enjoy finding local plants and learning about them. Ticks, for one thing; really rainy days for another. But at least in these cases you can tuck your pants into your socks, or stay indoors for the day and read a wildflower guide. Sadly, there is no cure for one other kind of nuisance: the all-too-frequent changes that occur in the scientific names of your favorite plants. How annoying that the Cut-leaved Toothwort, *Dentaria laciniata* (best seen locally at Big Reed in Montauk County Park) now is to be called *Cardamine concatenata*!

You probably began to learn these Latin-like tongue-twisters in the first place by listening to persuasive voices that said things like "Well, it's not so tough. Did you know that you are already using scientific names when you talk about a Rhododendron or a Gladiolus?" Or "These names allow scientists from different countries to communicate unambiguously about organisms of common interest." Or "English names for many kinds of plants are different from region to region, so sometimes it is hard to know what plant someone is talking about. My Tulip Tree is someone else's Yellow Poplar, or Whitewood or Tulip Poplar, but everybody knows *Liriodendron tulipifera*."

But the statement that really strikes a nerve as you are wincing from your recent toothwort-ache is the one that says "the name change was the result of the application of rules of the *International Code of Botanical Nomenclature*, a document that was drawn up to bring stability to the naming of plants." Yeah, right!

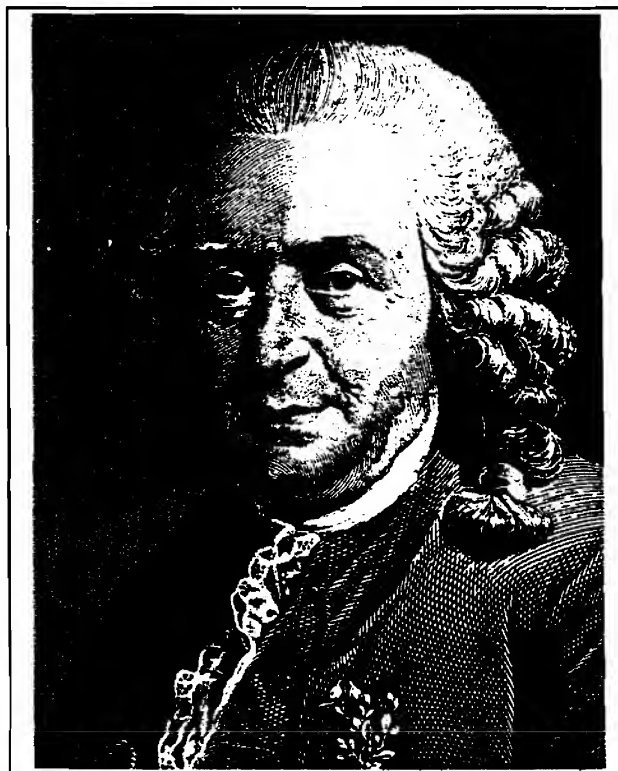
Yet it really does make sense, and I am hoping to explain here why this is so.

First let me introduce the 18th century Swedish naturalist Carolus Linnaeus. Meticulous, highly organized and well respected by his contemporaries, Linnaeus contributed in an important way to the development of taxonomic nomenclature, the science of the naming of organisms, by consistently using two-part names—what we now call binomials. Prior to Linnaeus the names of plants and animals were mostly short Latin descriptions (polynomials). The name of the common Buttercup for example

was given as *Ranunculus foliis peltatis quinquangularibus multipartitis laciniis linearibus caule multifloro* in Adrian van Royen's *Florae Leydensis Prodomus* of 1740. Linnaeus shortened this polynomial to consist only of the genus name plus a single descriptive adjective, i.e., *Ranunculus acris*. Here, the second word, called the specific epithet, refers to the bitter or acrid ("acris") herbage of this species. Linnaeus continued the long-held practice of coining names in Latin, the language of the educated.

In 1753 Linnaeus published *Species Plantarum* and in 1758 *Systema Naturae*, the results of his painstaking work on the taxonomy and nomenclature of plants and animals respectively. With a few exceptions, binomial nomenclature caught on quickly and Linnaeus' works became the field guides of their day. Scientists describing new species christened them with binomial names. And students in botany classes were undoubtedly thankful that they did not have to memorize lengthy polynomials.

These were times of colonialist expansion. Already, before *Species Plantarum*, Pehr Kalm and John Clayton had been sending plant specimens to Europe that they had collected in the American



Carl (or Carolus) Linnaeus (von Linné); 1707-1778.

colonies. And by the middle of the nineteenth century, every European country that was anybody had colonies all over the Americas, Africa, and the Far East. Territories were claimed by England, France, Spain, Portugal, Germany, Belgium, and the Netherlands among others. Virtually every colonizing expedition included at least one naturalist to gather specimens for the museums back home. As a result, European institutions experienced a great influx of materials, much of it from the tropics, and this in turn gave rise to a tremendous boom in the description of species new to science.

And it was here that two particularly troublesome problems with scientific names became especially obvious: one, that some species were being given more than one name; and two, that some names were being used to describe two or more entirely different species. This probably came about partly because of nationalistic and inter-institutional jealousies and rivalries that caused scientists to communicate less than they should have. One widespread African species that I work with, *Kosteletzkya buettneri*, was given three different names in 1890, 1894, and 1899 by a German, an Englishman, and a Belgian respectively. In another case in the same genus, two distinctly different species, one from western Mexico and another from tropical west Africa were given the same name, *Kosteletzkya stellata*, in 1895 by an American and in 1928 by two Englishmen respectively.

Naturally, this was a situation that, if not corrected, would lead to large-scale confusion. And so the first codes of botanical nomenclature came about as attempts to set up rules governing the naming of plants. From tentative beginnings in 1867, through a period of two or three conflicting codes all of which championed good ideas, the first truly unified and international code came out of a Cambridge, England meeting in 1924. Since 1950 an International Botanical Congress has met every few years, most recently in Tokyo in 1993, and one of the activities at the congresses has been to vote upon proposals for changes in the Code. The resulting changes have consisted primarily of refinements, clarifications and amendments, the overall framework having already been fairly well settled.

[As an aside I might mention that a separate Code of Zoological Nomenclature has been developed for the naming of animals. Ironically, though rules in

both codes legislate against using the same name for two different entities in their respective kingdoms (see discussion below), there is nothing to prevent, for example, a genus of animal and a genus of plant from having the same name. *Enallagma* is both a genus closely related to the Calabash Tree in the Bignonia Family, and a genus of damselflies commonly called Bluets in the family Coenagrionidae.]

Two major features of the Botanical Code are the **Type Method** and the **Principle of Priority**. The Type Method attempts to tie each published scientific name to an herbarium specimen (or sometimes an illustration) that an author used when he described his new plant. "Type" doesn't mean typical, nor is a type specimen to be given special weight in subsequent attempts to characterize a species. Typification is simply a way of permanently associating a name with a real entity from nature. *Hibiscus dasycalyx*, a globally rare Texas endemic Hibiscus, was named and described by S. F. Blake and I. Shiller in 1958. The type is a collection from Trinity Co., TX made on 23 June 1955 by Ivan Shiller (his collection no. 231) and deposited under accession no. 2,261,376 in the United States National Herbarium (Smithsonian Institution) in Washington, D.C. Nowadays authors of new names are required to designate types at the same time that their new species is described, but for earlier names sometimes considerable sleuthing is required to determine the type.

The Principle of Priority simply says that the first name to be given to a species is the one that must be used. This makes good, common sense and in fact was the practice of most botanists even before any Code appeared. Now there could be no doubt as to the correct name among a number of competing names, or "Synonyms." The *Kosteletzkya buettneri* mentioned earlier got that name because the author Gürke published it in 1890, beating out the other two contenders by four and nine years respectively.

The Principle of Priority has either settled or confirmed the correctness of tens of thousands of plant names and hence has led to a real nomenclatural stability. Unfortunately, it has also set the stage for occasional changes in established nomenclature that result from the unearthing of still earlier names. (I should add here that in considering earlier names, one need go back only as far as 1753 and Linnaeus' *Species Plantarum*. The Code says that anything earlier is not to be considered for priority

purposes.) The Halberd-leaved Rose Mallow, reported for the first time in New York within the last decade and widely distributed in the eastern United States, has been known for years as *Hibiscus militaris*, a name published in 1788. But now the plant has to be called *Hibiscus laevis* because this name has turned up in a book entitled *Auctarium ad Synopsis Methodicam Stirpium Horti Reg. Taurinensis* about the gardens in the city of Turin, Italy (Allioni, 1774). It seems that a plant of this species was growing in one of these gardens, apparently from seeds that had been brought earlier from America and introduced into cultivation.

Another situation where unsuspected older names are sometimes found is when an earlier author, through error or ignorance, has described a new plant but has placed it in a very different genus than the one to which it correctly belongs. That can mean that when someone else is attempting to find the correct name of a particular species, he hasn't a clue that a possibly earlier name is lurking out there in the literature somewhere.

This happened to me once. There is a widespread *Kosteletzkya* of lowland Mexico and the Caribbean region that had been known for decades by the 1824 name *K. pentasperma* until I found that the name could no longer be used (more about that shortly). That meant looking for other available names among the synonyms. According to the Principle of Priority I ought to have adopted the next oldest name, *K. tampicensis* (1830), but mostly by accident I discovered two earlier names whose relationship to *Kosteletzkya* had previously gone unnoticed: *Sida carnea* (1824) and a Linnaean name *Melochia depressa* (1753). The genus *Sida* is in the same family (Malvaceae) as *Kosteletzkya* but they are about as far apart within the family as they can be. *Melochia* is in a different family altogether, the Sterculiaceae or Cacao Family, but the types of the two names, that is the specimens to which the names are "attached," clearly belong to the species that has been called *K. pentasperma*. The earliest name being Linnaeus', that name (actually its specific epithet) must be used for the Mexican-Caribbean species. It is now known as *Kosteletzkya depressa*.

In the previous paragraph I said that *Kosteletzkya pentasperma* (1824) could no longer be used. This is because I discovered that the same name had been

published in 1822 by someone else for a different species of *Kosteletzkya*. When the names for two different plants are the same they are called "homonyms" and, not surprisingly, homonyms are not permitted in plant nomenclature. By the Principle of Priority, the earlier-named of the two species gets to keep the name, and the plant with the later (younger) homonym must be given a different name in accordance with the Code, as was described in the paragraph above.

You may recall another case of homonymy mentioned earlier, in which a species from West Africa and a different species from western Mexico were both named *Kosteletzkya stellata*. In this case the earlier (1895) Mexican species keeps the shared name, and the West African (1928) species has to get a different name—in this case a new one, because there are no synonyms available to choose from. I am calling it *Kosteletzkya semota* though it is not my intention to publish it here.

I hope that I have shed some light on the apparent paradox that the very rules that are intended to promote stability can also seem occasionally to combat stability. And since I know that being provided with insight into the causes of a problem doesn't necessarily make one any happier about the problem itself, I offer this glimmer of hope. There has been for some time a provision in the Code that allows one to propose keeping a genus name that has long been in use even though an earlier but unfamiliar name has been found. Such proposals for exceptions to the rules of the Code go to a committee for consideration and are voted upon at an International Botanical Congress. There is by now a substantial list of these conserved genus names or *nomina conservanda*, among them *Hibiscus* and *Kosteletzkya*, which, had they not been conserved some years ago, would have been called *Malvaviscus* and *Thorntonia* in the discussion here. Moreover, within the last ten or fifteen years it has become possible to propose the conservation of species names as well, and the actions and spirit of the 1993 Tokyo Congress were such as to make such conservation both easier and more desirable to accomplish in the future.

Now if we could only establish rules about ticks and the weather.

Skip Blanchard, Long Island University
C. W. Post Center

Plant Communities of Long Island, New York

The list of plant communities is largely based upon the classification system of Reschke (1990): "Ecological Communities of New York State."

Marine System

1. Marine eelgrass meadow
2. Marine intertidal mudflats*
3. Marine intertidal gravel/sand beach*
4. Marine rocky intertidal*

Estuarine System

5. Tidal river
6. Tidal creek
7. Brackish subtidal aquatic bed
8. High salt marsh
9. Low salt marsh
10. Salt panne
11. Salt shrub
12. Coastal salt pond
13. Brackish tidal marsh
14. Brackish intertidal mudflats
15. Brackish intertidal shore

Riverine System

16. Marsh headwater stream
17. Intermittent stream
18. Coastal plain stream

Lacustrine System

19. Coastal plain pond
20. Perched pond

Palustrine System (open, mineral soil wetlands)

21. Deep emergent marsh
22. Shallow emergent marsh
23. Shrub swamp
24. Coastal plain pond shore
25. Brackish interdunal swales
26. Brackish meadow
27. Pine barrens vernal pond
28. Pine barrens shrub swamp

Palustrine System (con't) (open peatlands)

29. Sedge meadow
30. Coastal plain poor fen
31. Sea level fen
32. Highbush blueberry bog thicket

(forested, mineral soil wetland)

33. Red maple-tupelo swamp
34. Vernal pond

(forested peatlands)

35. Coastal plain Atlantic white cedar swamp

Terrestrial System (open uplands)

36. Maritime beach
37. Maritime dunes
38. Maritime interdunal swale
39. Maritime shrubland
40. Maritime heathland
41. Maritime grassland
42. Hempstead Plains grassland
43. Successional blueberry heath
44. Successional old field
45. Successional shrubland

(barrens and woodlands)

46. Dwarf pine plains
47. Pitch pine-scrub oak barrens
48. Pitch pine-oak-heath woodland
49. Maritime pitch pine-heath barrens
50. Successional red cedar woodland

(forested uplands)

51. Maritime holly-oak forest
52. Maritime oak forest
53. Maritime beech forest
54. Maritime red cedar forest
55. Pitch pine-oak forest
56. Appalachian oak-hickory forest
57. Chestnut oak forest
58. Oak-tulip tree forest
59. White pine-oak forest
60. Successional southern hardwoods
61. Successional maritime forest

*The 5-kingdom system of classification does not include marine algae in the Plant Kingdom.

Eric Lamont. Riverhead

Society News

March Meeting: Glenn Richard reported that the newly sprouted oak leaves in the Pine Barrens burn site ("Sunrise Fire") had kept their green color into February. Gary Kennen reported that he collected and tried to germinate 1000 serotinous Pitch Pine seeds without success; he requested ideas: Too hot a fire? Is dormancy required? Could the seeds be dead from old age? A suggestion was made to collect more seeds, scarify them by shaking in a can of sand, and try again. Member's Night began with a few slides of the largest flower in the world, *Rafflesia arnoldii*, (as much as 3 feet across) photographed in Indonesia by Zu Proly; Ray Welch showed "then-and-now" photos of a Target Lichen on Mt. Washington; Tom Stock had members identifying plants from famous paintings; Steve Clemants showed slides from the Yucatan; Skip Blanchard showed slides of orchids; Barbara Conolly brought 9 albums of LIBS Field Trip Photos since 1987.

April Meeting: Despite a record 12 inches of snow that began falling during the early evening, 13 members attended the meeting. The speaker cancelled, but with foresight Skip Blanchard brought slides on plant/insect interactions, and Eric Lamont showed wildflowers of the Smoky Mts. and Mt. Washington. Carol Johnston announced that 75-80% of all honey bees on L.I. are dead due to an exotic mite infestation.

Another Golf Course Proposal

LIBS member Art Cooley has requested help in preparing a plant inventory for the 260 acre Havens property, owned by Suffolk Co., located in Center Moriches along the west shore of the Terrels River and bordering Great South Bay. The County purchased the property in 1989 and set it aside as open space, but now wants to develop it into a golf course. Art has already located a quarter acre clone of Clubmoss (*Lycopodium obscurum*) and numerous old trees, but requests additional help in locating significant plants. If interested, please call Art at 516/ 289-2955.

Education Committee Report

On Earth Day, April 21st, Mary Laura Lamont represented LIBS at Quogue Wildlife Refuge by leading a workshop and hike into the Pine Barrens, followed by a hike through some burned areas of the "Sunrise Fire" site in Westhampton (the day was also sponsored by Moriches Bay Audubon Society). On June 9th Tom Stock will represent LIBS at the Sweetbrier Nature Center by offering a hands-on activity program on mosses and ferns.

Executive Board Meeting

A meeting of the Executive Board will be held on 28 May 1996 at 7:15pm (before the flora committee meeting) at the Planting Fields Arboretum Library. All members are welcome.

Field Trips

5 May 1996 (Sunday), ALLEY POND PARK WOODS; Leader: Patrick Cooney (914/478-1803). Meet at 10am at the parking lot of Alley Pond Park woods, across from the grounds of Creedmoor Psychiatric Center. (There is a second parking lot to the west of this parking lot.) Note that this is not Alley Pond proper, which is located on Northern Blvd. **DIRECTIONS** from Nassau Co.: take Northern State Pkwy west to the Queens border, at which point Northern State turns into Grand Central Pkwy; pass over Cross Island Pkwy; travel west for a very short distance and very quickly exit for the parking lot of Alley Pond Park woods. Bring lunch, ample beverage, insect repellent, and be prepared for wet walking. (Joint trip with the Torrey Botanical Club.)

18 May 1996 (Saturday), 10am, PINE BARRENS BURN SITE; Leader: Bruce Lund (516/367-3225). Come along on a half day walk to botanize through the heart of last summer's "Sunrise Fire" burn area to see what botanical surprises might be appearing in this first season of regrowth after the fire. We'll also visit a bit of the globally rare dwarf pine barrens and for contrast, drop into a wetland valley - unexpected in these dry pine barrens. Be prepared for strenuous walking in loose sand. Especially if it's sunny and warm, you may want a hat, sunscreen, and water. **DIRECTIONS:** Take Exit 63 on Sunrise Hwy (Rte. 27) in Southampton. Go south on Rte. 31 for 1.5 mi. Turn right at the light onto Stewart Ave. Go through the Coast Guard housing complex and park in the lot beside the town ball field and tennis courts.

26 May 1996 (Sunday), 2-4pm, HOFSTRA UNIVERSITY ARBORETUM; Leader: Tom Stock. "Botany, Sculpture & History" of the 7000 tree specimens (comprising 250 species) of the Arboretum. **DIRECTIONS:** Hofstra University is located in Nassau Co. on Hempstead Tpke just west of Meadowbrook Pkwy; meet in the parking lot in the Greenway, north of the Student Center.

15 June 1996 (Saturday), SHRUB-A-THON. Walk on the wild side with Betty Lotowycz and Barbara Conolly to list all the shrubs we can at Quogue and on the South Fork. Meet at Quogue Wildlife Refuge at 9:30am. Bring lunch. **DIRECTIONS:** Take Exit 64 on Sunrise Hwy (Rte. 27) to Rte. 104 (Quogue-Riverhead Rd) south; travel about 2 mi. and turn right (west) on Old Country Rd; the Refuge is less than 1 mi. down the road, north of the railroad tracks.

Mark your calendar for these future field trips (details to follow in the next issue of the Newsletter):

20 July 1996, Joralemon Park, Albany Co., NY. Fern-rich, calcareous woodlands; Leader: Al Breisch.

10 August 1996, Pound Ridge, NY. Leader: Skip Blanchard.

21 September 1996, Floyd Bennett Field, Gateway Natl. Recreation Area; Leader: Patrick Cooney.

LONG ISLAND BOTANICAL SOCIETY

Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Skip Blanchard
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Education	Mary Laura Lamont
	Tom Stock
Hospitality	Nancy Smith
	Betty Lotowycz
Program	Skip Blanchard
	Steven Clemants
Editor	Eric Lamont

Membership

Membership is open to all, and we welcome new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership Chairperson, 45 Sandy Hill Road, Oyster Bay, NY 11771-3111

PROGRAMS

14 May 1996 - 7:30 pm*, Dr. Eric Lamont

"Plant Communities of Long Island, NY;"

Muttontown Preserve Nature Center, East Norwich. Slides & lecture, see page 20 for more information.

11 June 1996 - 3rd Annual LIBS Barbecue

Glenn Richard will once again host this year's evening of activities at the Swan Pond Biological Station of SUNY at Calverton.

Please see the enclosed flier for specific information.

*Refreshments & informal talk begins at 7:30pm the meeting starts at 8pm. For directions to Muttontown Preserve call 516-571-8500.

LONG ISLAND BOTANICAL SOCIETY

c/o Muttontown Preserve

Muttontown Lane

East Norwich, New York 11732

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